### Course Goal(s)

The goal of this course is to make students aware of the impact of current research and current standards of care in Genetics on their clinical practices. Students will use case studies to develop their clinical reasoning skills in the diagnosis, prevention, and treatment of genetic diseases. Emphasis will be placed on taking a family history, creating a pedigree, and on the role of genetic testing. Ethical, legal, and social issues may also be discussed.

### Educational Objectives

Upon completion of this course, the student will:

- Have viewed a virtual genetic counseling session conducted by a medical geneticist or genetic counselor who will:
  1. Elicit a complete family history and create a pedigree.
  2. Describe the genetic basis of disease.
  3. Use information systems to acquire appropriate information about the prediction and management of genetic disease.
  4. Recommend genetic screening and testing to predict the occurrence of genetic disease.
  5. Counsel the patient about genetic screening and testing.
  6. Counsel the patient about the prevention and treatment of genetic disease.
  7. Provide patients and their families with appropriate information resources.
  8. Discuss with patients the ethical, legal, and social issues of genetic testing and genetic diseases.

- Have generated a pedigree and write-up of the patient encounter.

- Reviewed a breast cancer case, constructed a pedigree of the case, and made recommendations.

- Researched genetic information resources.

- Read an article, play, etc., related to genetics.

- Performed a self-assessment on their genetic knowledge.

### Course Readings

On the Discussion Board in BlackBoard

### Course Activities/Experience

Listed in Educational Objectives.
<table>
<thead>
<tr>
<th>On Call Requirements</th>
<th>None</th>
</tr>
</thead>
</table>
| **Student Performance & Assessment** | • Disease presentation and use of online resources.  
  • Breast cancer case pedigree and recommendations.  
  • Patient presentation (written with pedigree) of the virtual genetic counseling session.  
  • Participation in all of the course activities |